



INFLUENZA

WHAT IS THE PUBLIC HEALTH PROBLEM?

- Influenza viruses cause annual epidemics and periodically cause pandemics (sudden pervasive infections in all age groups on a global scale). Three pandemics have occurred during the past century
- In the United States, influenza epidemics are associated with an annual average of 36,000 deaths and more than 110,000 hospitalizations. Between 50,000 to 70,000 influenza-related deaths and 200,000 hospitalizations can occur during serious epidemics.
- According to CDC mathematical models, an influenza pandemic could result in an estimated fivefold increase in U.S. deaths (89,000 to 207,000) and hospitalizations (314,000 to 734,000) compared with an average influenza epidemic.
- Of all emerging infections, influenza has the greatest likelihood of causing widespread illness, death, and social disruption.
- Many BT threats first present as an influenza-like illness and many similarities exist between influenza pandemic preparedness and preparing for bioterrorism.

WHAT HAS CDC ACCOMPLISHED?

- CDC continues to strengthen the international network of collaborating laboratories to monitor the emergence and spread of new epidemic and pandemic strains of influenza. CDC also provides both international and domestic outbreak response.
- CDC provides support to states to improve the infrastructure needed to respond to epidemics and a possible pandemic of influenza and provides technical assistance for pandemic planning.
- CDC conducts research aimed at developing rapid molecular methods for characterizing novel influenza viruses and the human antibody response to them.
- In partnership with other government agencies, CDC continues to work on a plan for pandemic influenza response.

Example of program in action: Through the World Health Organization (WHO), CDC has provided support for influenza surveillance in Asia, Europe and Latin America. This support allows long-term, year-round influenza surveillance to monitor for variant viruses that could circulate in the United States in the future. Early identification allows inclusion of new variant viruses in the annually reformulated influenza vaccine before epidemics caused by these viruses occur in the United States.

WHAT ARE THE NEXT STEPS?

With its partners, CDC will continue to develop and implement a comprehensive, practical, and action-oriented approach for both the public and private sectors to improve the prevention and control of influenza in the United States during the present inter-pandemic period. CDC and partners will also identify and implement mechanisms, policies, and procedures to improve our readiness for a future pandemic. For further information on influenza pandemic preparation, see the program in brief *Pandemic Influenza Planning*.

For more information on this and other CDC programs, visit www.cdc.gov/programs.

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